

[illegible]

<120> Sodium/Proton antiporter gene

<130> MOA-006PCT

<150> JP 1998-365604

<151> 1998-12-22

<160> 2

<170> PatentIn Ver. 2.0

 $\langle 210 \rangle$ 1

<211> 2330

<212> DNA

<213> *Oryza sativa*

 $\langle 220 \rangle$

$\langle 221 \rangle$ CDS

<222> (297).. (1901)

 $\langle 400 \rangle$ 1

Glu Ser Ile Thr Ala Leu Ile Ile Gly Leu Cys Thr Gly Val Val Ile

65

80

95

110

125

145

160

SECRET

165 170 175

Leu Val Phe Gly Glu Gly Val Val Asn Asp Ala Thr Ser Ile Val Leu

180 185 190

Phe Asn Ala Leu Gln Asn Phe Asp Leu Val His Ile Asp Ala Ala Val
195 200 205

gtt ctg aaa ttc ttg ggg aac ttc ttt tat tta ttt ttg tcg agc acc 971
Val Leu Lys Phe Leu Gly Asn Phe Phe Tyr Leu Phe Leu Ser Ser Thr
210 215 220 225

ttc ctt gga gta ttt gct gga ttg ctc agt gca tac ata atc aag aag 1019
Phe Leu Gly Val Phe Ala Gly Leu Leu Ser Ala Tyr Ile Ile Lys Lys
230 235 240

cta tac att gga agg cat tct act gac cgt gag gtt gcc ctt atg atg 1067
Leu Tyr Ile Gly Arg His Ser Thr Asp Arg Glu Val Ala Leu Met Met
245 250 255

c t c a t g g c t t a c c t t t c a t a t a t g c t g g c t g a g t t g c t a g a t t t g a g c 1115
Leu Met Ala Tyr Leu Ser Tyr Met Leu Ala Glu Leu Leu Asp Leu Ser

270

Gly Ile Leu Thr Val Phe Phe Cys Gly Ile Val Met Ser His Tyr Thr

285

Trp His Asn Val Thr Glu Ser Ser Arg Val Thr Thr Lys His Ala Phe

305

Ala Thr Leu Ser Phe Ile Ala Glu Thr Phe Leu Phe Leu Tyr Val Gly

320

Met Asp Ala Leu Asp Ile Glu Lys Trp Glu Phe Ala Ser Asp Arg Pro

335

Gly Lys Ser Ile Gly Ile Ser Ser Ile Leu Leu Gly Leu Val Leu Ile

350

Gly Arg Ala Ala Phe Val Phe Pro Leu Ser Phe Leu Ser Asn Leu Thr

365

370 375 380 385

tgg tgg gct ggg ctg atg aga gga gct gtg tcg att gct ctt gct tac 1499
Trp Trp Ala Gly Leu Met Arg Gly Ala Val Ser Ile Ala Leu Ala Tyr
390 395 400

aat aag ttt aca aga tct ggc cat act cag ctg cac ggc aat gca ata 1547
Asn Lys Phe Thr Arg Ser Gly His Thr Gln Leu His Gly Asn Ala Ile
405 410 415

atg atc acc agc acc atc act gtc gtt ctt ttt agc act atg gta ttt 1595
Met Ile Thr Ser Thr Ile Thr Val Val Leu Phe Ser Thr Met Val Phe
420 425 430

ggg atg atg aca aag cca ttg atc agg ctg ctg cta ccg gcc tca ggc 1643
Gly Met Met Thr Lys Pro Leu Ile Arg Leu Leu Leu Pro Ala Ser Gly
435 440 445

cat cct gtc acc tct gag cct tca tca cca aag tcc ctg cat tct cct 1691
His Pro Val Thr Ser Glu Pro Ser Ser Pro Lys Ser Leu His Ser Pro
450 455 460 465

ctc ctg aca agc atg caa ggt tct gac ctc gag agt aca acc aac att 1739
Leu Leu Thr Ser Met Gln Gly Ser Asp Leu Glu Ser Thr Thr Asn Ile

480

Val Arg Pro Ser Ser Leu Arg Met Leu Leu Thr Lys Pro Thr His Thr

495

Val His Tyr Tyr Trp Arg Lys Phe Asp Asp Ala Leu Met Arg Pro Met

510

Phe Gly Gly Arg Gly Phe Val Pro Phe Ser Pro Gly Ser Pro Thr Glu

525

Gln Ser His Gly Gly Arg

535

tgtagagttt ggctgctgct aatgagttgt tgatagtgcc tatattcttc agaacttcag 2051

gglttgltt gtcaggatga accctagtaga gtagacacagg gtagatgtgtt ccgacaacct 2171

Ile Leu Leu Met Thr Lys Gly Lys Ser Ser His Leu Phe Val Phe Ser

Gly Phe Gln Val Lys Lys Lys Gln Phe Phe Arg Asn Phe Met Thr Ile
100 105 110

Thr Leu Phe Gly Ala Val Gly Thr Met Ile Ser Phe Phe Thr Ile Ser
115 120 125

Ile Ala Ala Ile Ala Ile Phe Ser Arg Met Asn Ile Gly Thr Leu Asp
130 135 140

Val Gly Asp Phe Leu Ala Ile Gly Ala Ile Phe Ser Ala Thr Asp Ser
145 150 155 160

Val Cys Thr Leu Gln Val Leu Asn Gln Asp Glu Thr Pro Phe Leu Tyr
165 170 175

Ser Leu Val Phe Gly Glu Gly Val Val Asn Asp Ala Thr Ser Ile Val
180 185 190

Leu Phe Asn Ala Leu Gln Asn Phe Asp Leu Val His Ile Asp Ala Ala
195 200 205

220

240

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270

285

300

320

335

350

Ile Val Arg Pro Ser Ser Leu Arg Met Leu Leu Thr Lys Pro Thr His

490

495

Thr Val His Tyr Tyr Trp Arg Lys Phe Asp Asp Ala Leu Met Arg Pro

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510

Met Phe Gly Gly Arg Gly Phe Val Pro Phe Ser Pro Gly Ser Pro Thr

520

525

Glu Gln Ser His Gly Gly Arg

535

[illegible]